Starters 4/22

Textbook p 316

Problems 6-9

Chapter 7 Data Analysis and Lines of Best Fit

7.3 Line of Best Fit

Unit Question: Where am I? & Where am I Going? (Part 2)

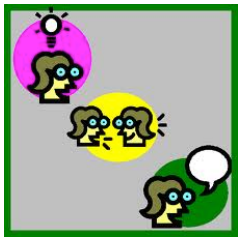
Learner Profile: Balanced

Area of Interaction: Health & Social Education

I Can Statement:

I can draw and predict from a line of best fit.

Think, Pair, Share



Define positive, negative, and no correlation. Give an example of each.

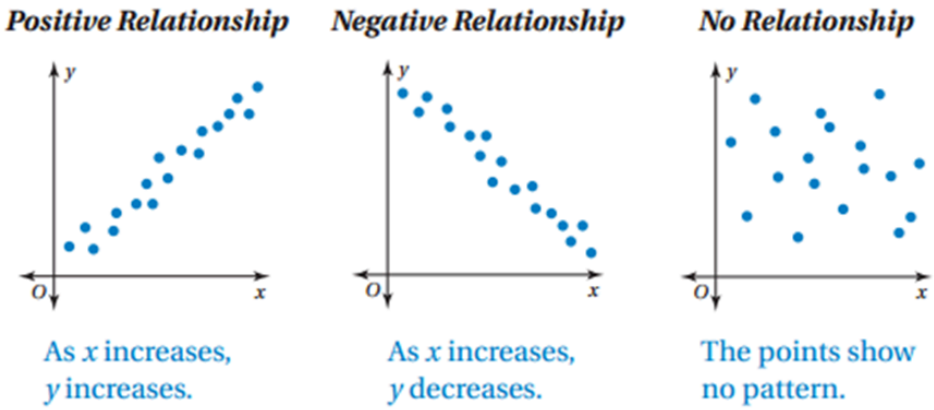
Review from yesterday:

Data: factual information (as measurements or statistics) used as a basis for reasoning, discussion, or calculation.

Analysis of data is a process of inspecting, transforming, and modeling **data** with the goal of highlighting useful information, suggesting conclusions, and supporting decision making.

Displaying Data: Data can be displayed in various ways (usually a graph.) Today we will be using scatter plots.

Relationships between data sets:



What have we already studied this year, that this is very similar to above? Review what we did on the think, pair, share.

Open Journal to page 147.

1 ACTIVITY: Representing Data by a Linear Equation

Work with a partner. You have been working on a science project for 8 months. Each month, you have measured the length of a baby alligator.

The table shows your measurements.

	September							April
Month, *x*	0	1	2	3	4	5	6	7
Length (in.), *y*	22.0	22.5	23.5	25.0	26.0	27.5	28.5	29.5

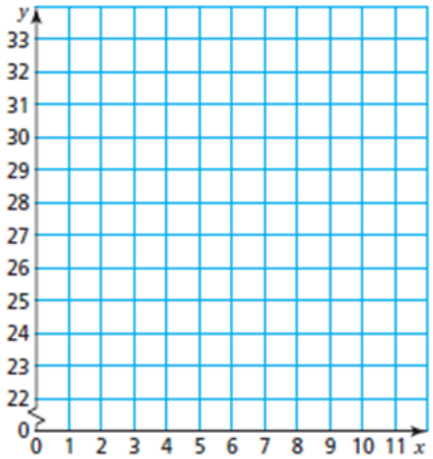
Use the following steps to predict the baby alligator's length next September.

a. Graph the data in the table.

b. Draw the straight line that you think best approximates the points.

c. Write an equation of the line you drew.

d. Use the equation to predict the baby alligator's length next September.



Key Vocabulary

A Line of Best Fit: is a line drawn on a scatter plot that is close to most of the data points. It can be used to estimate data on a graph.

Open Journal to page 148

2 ACTIVITY: Representing Data by a Linear Equation

Work with a partner. You are a biologist and are studying bat populations.

You are asked to predict the number of bats that will be living in an abandoned mine in 3 years.

To start, you find the number of bats that have been living in the mine during the past 8 years.

The table shows the results of your research.

7 years ago — this year

Year, x	0	1	2	3	4	5	6	7
Bats (thousands), y	327	306	299	270	254	232	215	197

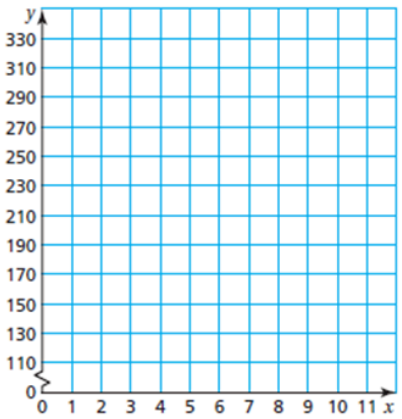
Use the following steps to predict the number of bats that will be living in the mine after 3 years.

a. Graph the data in the table.

b. Draw the straight line that you think best approximates the points.

c. Write an equation of the line you drew.

d. Use the equation to predict the number of bats in 3 years.



I Can Statement:

I can draw and predict from a line of best fit.

Assignment:

Workbook p. 148-149

Textbook p293-295 1-16all